

FIG. 1

Serial Mapping System

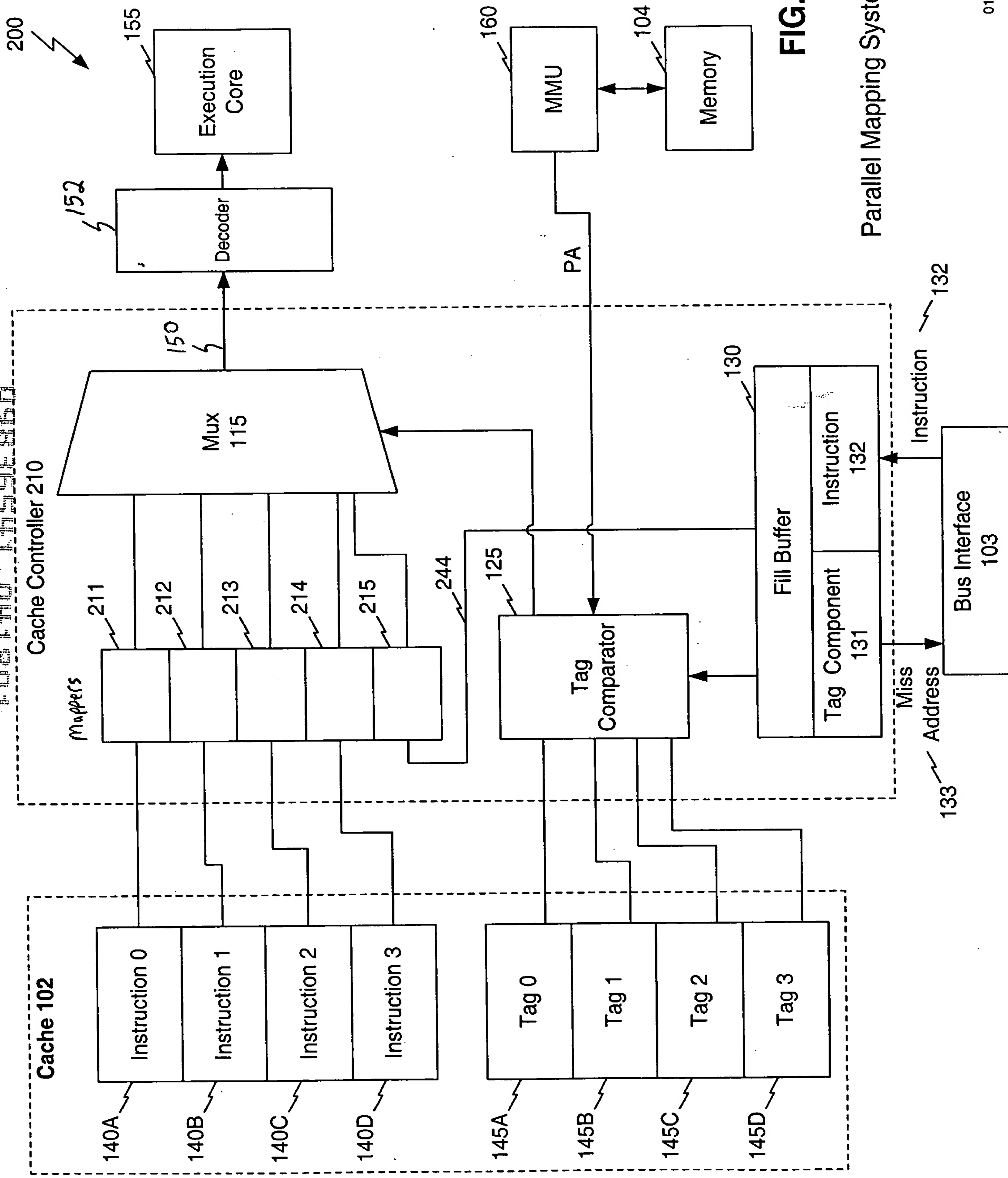


FIG. 2

Parallel Mapping System

$t \rightarrow$

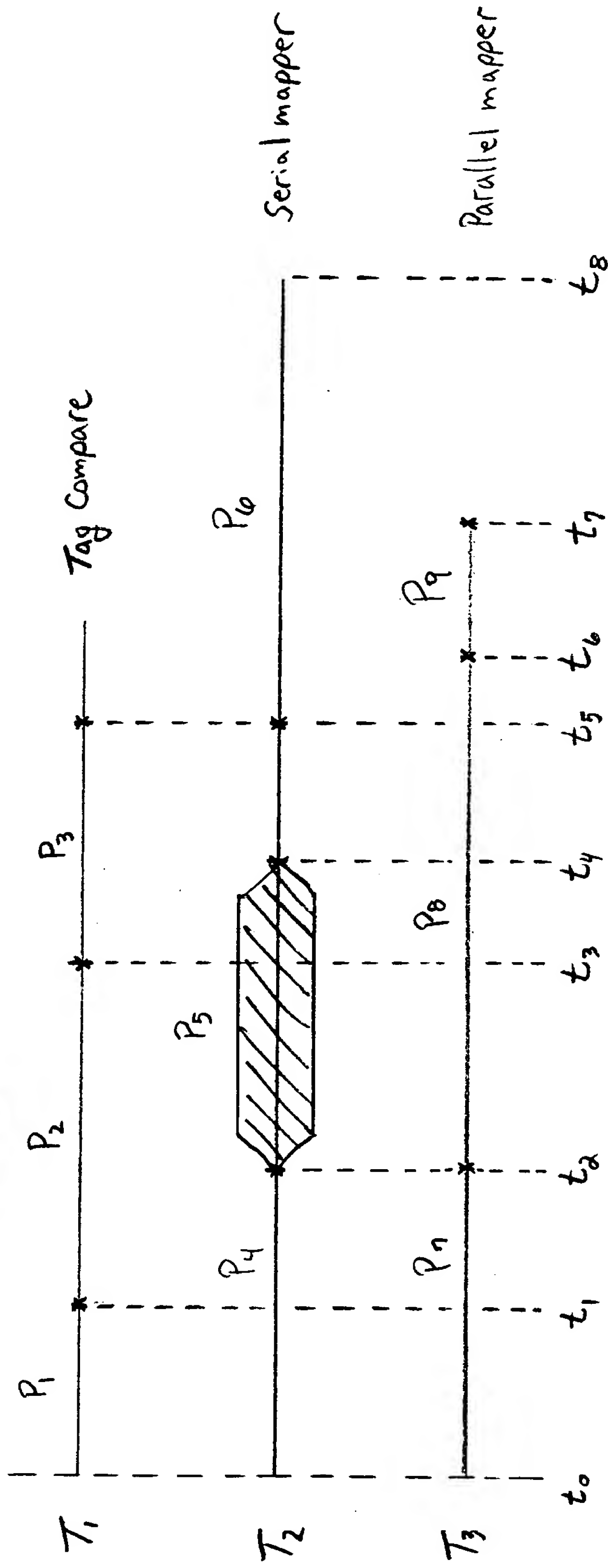


FIG. 3

```
graph TD; 410[Read each instruction and corresponding tag from instruction cache into a corresponding one of a plurality of mappers and tag comparator, respectively] --> 420[Map 16-bit instructions to 34-bit PIWF configuration]; 410 --> 430[Simultaneously compare tags of the 16-bit instructions to the tag of the address being sought]; 420 --> 440[Transmit a signal to the multiplexer indicating the desired instruction to be selected]; 430 --> 440; 440 --> 450[Select the desired instruction and transmit it to the execution core];
```

410 Read each instruction and corresponding tag from instruction cache into a corresponding one of a plurality of mappers and tag comparator, respectively

420 Map 16-bit instructions to 34-bit PIWF configuration

430 Simultaneously compare tags of the 16-bit instructions to the tag of the address being sought

440 Transmit a signal to the multiplexer indicating the desired instruction to be selected

450 Select the desired instruction and transmit it to the execution core

0101-94.vsd/4

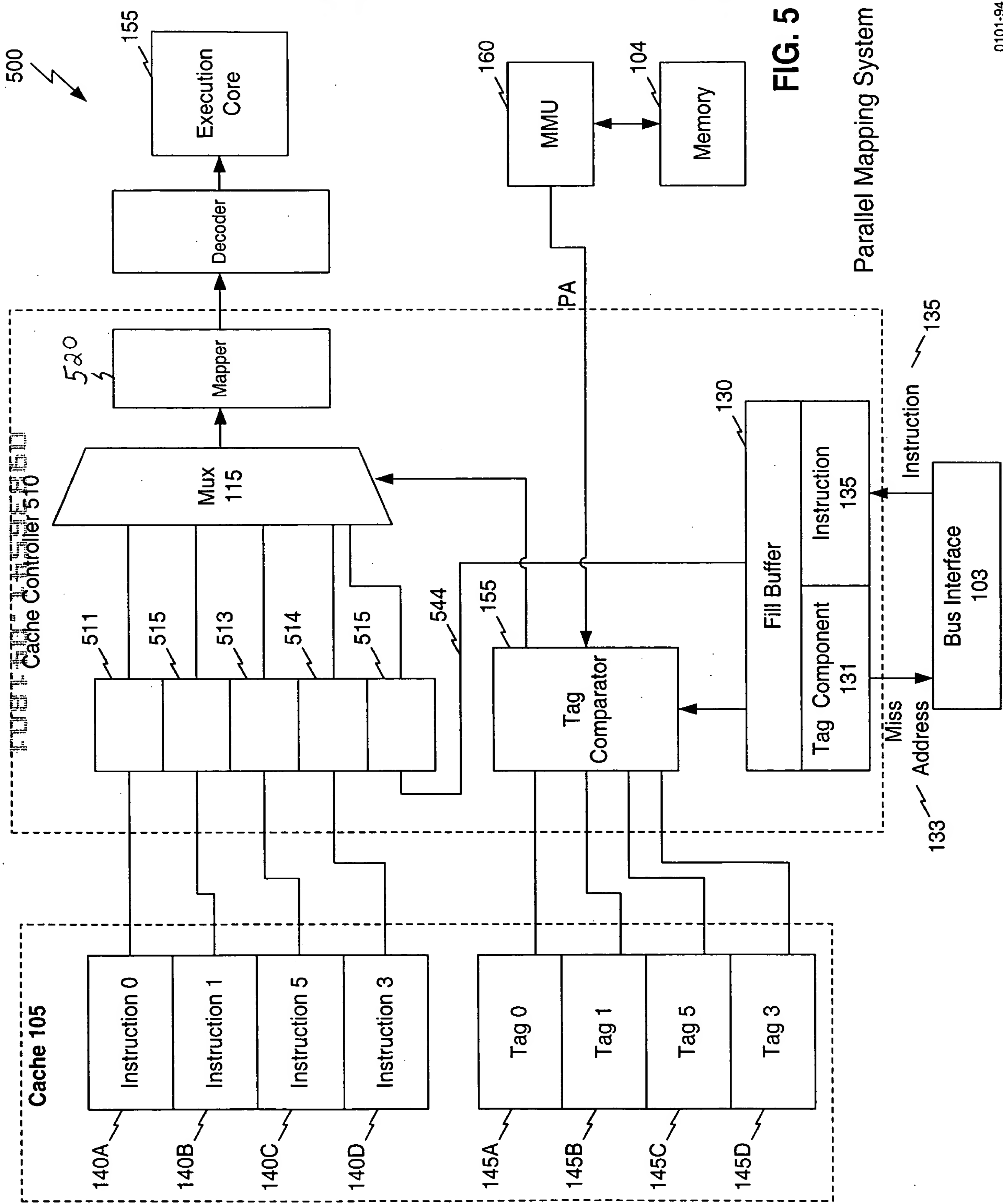


FIG. 5

Parallel Mapping System